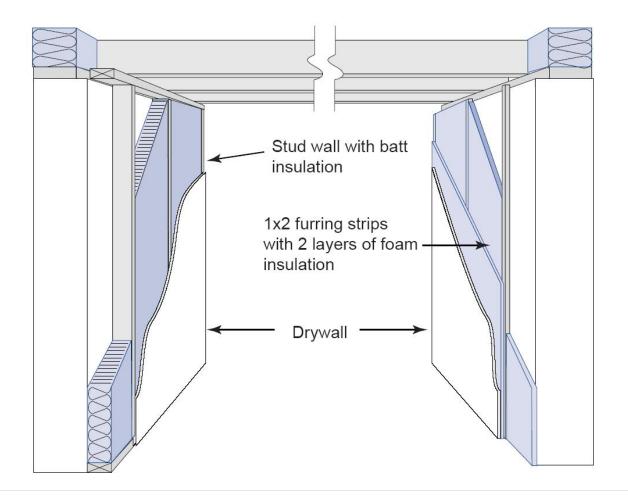


Basement Insulation Techniques

DAYLIGHT BASEMENT Frame section Masonry above-grade Masonry below-grade



INTERIOR BASEMENT WALL INSULATION STRATEGIES



Residential basement insulation levels should be selected in accordance with the International Energy Conservation Code, or the local energy code. Be sure to insulate both the masonry and stud walls of daylight basements.

There are three primary ways to insulate the masonry portion of a basement wall:

- 1. Exterior insulation 1 to 3 inches are recommended for most climate zones. Extruded polystyrene (R-5 per inch) is durable and moisture resistant. Expanded polystyrene (R-4 per inch) is less expensive, but it has a lower insulating value. High-density, drainable, fiberglass insulation or fiberous drainboard does not insulate as well as foam but provides a drainage plane. Leave a 6-inch gap between the insulation and wood foundation elements to provide a termite inspection area. Insulate rim joists.
- 2. Interior insulation usually installed behind interior framing or with furring strips placed against the foundation wall (see figure). Joints and penetrations through the drywall must be well sealed to prevent movement of moisture laden air into the insulation and possible condensation. Insulate rim joists.
- 3. Insulated Concrete Forms comparatively new products that are relatively easy to install. Once the hollow foam blocks are stacked, the cores are filled with concrete. Most products provide continuous insulation on the interior and exterior. They also provide surfaces for attaching drywall, brick ties, and other finish materials. Many new insulated concrete forms are treated with termite-resistant chemicals. Insulate rim joists.



This article is an exerpt from the **Basement Insulation** .